

Notice of Allowability

Application No.

09/194,598

Examiner

David H Kruse

Applicant(s)

DELESALLE ET AL

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 10 May 2004.
2. ☒ The allowed claim(s) is/are 19,21,24-28 and 31-33.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date SAME.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment, which places this application in condition for allowance. During a telephone conversation conducted on 2 June 2004, Matthew E. Mulkeen requested an extension of time for 1 MONTH(S) and authorized the Director to charge Deposit Account No. 190741 the required fee of \$110 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

The title of the invention has been replaced with the following title;

-- METHODS OF MAKING CYTOPLASMIC MALE STERILE CHICORY PLANTS
COMPRISING THE ORF 522 OF HELIANTHUS ANNUUS --

The Abstract of the invention has been replaced with the following;

-- The invention is directed to methods of making cytoplasmic male sterile chicory plants by identifying a diagnostic 347bp fragment of the orf 522 of *Helianthus annuus*. --

Claim 19. (Amended) A method of producing a chicory plant that exhibits cytoplasmic male sterility comprising:

(a) introducing into [a] cells of a chicory plant a mitochondrion of a male sterile plant that comprises the orf 522 sequence of *Helianthus annuus*;

(b) regenerating chicory plants; and

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(b) identifying [in the] a chicory plant [or cell thereof, a] comprising a 347bp fragment of said orf 522 comprising the nucleotide sentences of SEO ID NO: 1 and SEO ID NO: 2.

Claim 23 has been cancelled.

Claim 24 (Amended) The method of claim 19, further comprising crossing the chicory plant as the female parent with a second chicory plant.

At claim 25, line 1, -- chicory -- has been inserted after "second".

Claim 26 (Amended) A method of producing a chicory plant cell that expresses cytoplasmic male sterility comprising:

(a) fusing chicory plant cells with cells of a second plant cell that comprises a nucleotide sequence conferring cytoplasmic male sterility, wherein the nucleotide sequence comprises a 347 bp fragment of the orf 522 of *Helianthus annuus* comprising the nucleotide sequences of SEO ID NO: 1 and SEO ID NO: 2 [sequence of *Helianthus annuus*]; and

(b) detecting the 347 bp fragment in the plant cells.

Claim 27 (Amended) The method of claim 26, wherein the chicory plant cells [comprise a nucleus] are from *Chicorium intybus* or *Cichorium endivia*.

Claim 30 has been cancelled.

Claim 31 (Amended) The method of claim 26, further comprising [propagating the recombinant plant cell and producing] regenerating a [recombinant] chicory plant having cytoplasmic male sterility from a fused chicory plant cell comprising the 347 bp fragment.


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Claim 32 (Amended) The method of claim 31, further comprising crossing the [recombinant] regenerated chicory plant as the female parent with a second chicory plant.

2. Applicant's Attorney, Matthew Mulkeen conveyed that the Applicant's have approved the amendment, see attached Interview Summary.
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (571) 272-0799. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (571) 272-0804. The fax telephone number for this Group is (703) 872-9306 Before Final or (703) 872-9307 After Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-0547.


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David H. Kruse, Ph.D.
2 June 2004